THE EFFECTS OF FOREIGN CAPITAL INFLOW ON INTEREST RATES

AND INVESTMENT FUNDS IN THE UNITED STATES

#### Introduction and Executive Summary

In the second half of 1982 and into 1983 a large deficit began to develop on the U.S. current account, and forecasts indicate that a substantial widening of the deficit will occur over the next several years. The current account deficit reflects an excess in the value of merchandise imports over exports, not fully offset by U.S. income on services and other current account transactions.

Traditionally, the current account was thought to drive international transactions. A net export deficit was interpreted as reflecting dwindling U.S. competitiveness in foreign markets, forcing the United States to borrow capital to finance imports. Currently, however, there are reasons to believe that the capital account is the driving force, as foreigners seek to invest in the United States. As they exchange their own currencies for ours, the value of the dollar is pushed upward, making U.S. exports more expensive and imports cheaper and causing the large current account deficit. The demand for dollars to invest in the United States could reflect any of a number of causes, including the favorable economic outlook resulting from U.S. success in battling inflation, the policies for growth put in place during the last several years, high real interest rates, and political stability compared to other areas of the world.

If it is true that the rest of the world is intentionally seeking out the United States as a capital investment location, there could be a beneficial impact on U.S. credit and equity markets and a valuable supplement to domestic savings with the current account deficit arising as a more or less inevitable consequence. The purpose of this paper is to outline the probable magnitude of the impact of funds from abroad.

by the fact that the U.S. capital inflow are somewhat hampered by the fact that the U.S. capital account actually shows a large deficit, which is statistically impossible as long as the current account is also in deficit. The discrepancy between the two could theoretically be in either the current or capital account but it is generally believed that the largest portion reflects inadequate measurement of foreign capital inflows from abroad. This interpretation squares with the fact that the dollar has appreciated steadily in foreign exchange markets at a time when the current account was moving toward deficit. Because of the very large discrepancy, which indicates unrecorded capital inflow on the order of \$40 billion in 1982, one cannot trace the particular types of money and capital market instruments into which funds are flowing.

In addition to the technical limitation of inadequate balance of payments and capital flow statistics, the present paper is deliberately limited in scope. The paper does not address such issues as why the dollar is felt by some to be overvalued, its impact on export industries and on inflation, or the result of the use by the United States of world capital resources.

The overall findings of the study show the following:

- o Foreign capital inflows are small compared to gross domestic saving and total funds raised in credit and equity markets, and therefore their impact on investment and interest rates so far has probably been fairly limited.
- O Still, because of very low total net saving recently in our economy (and a negative in the fourth quarter of 1982), these funds may have provided a significant supplement.
- Overall, foreign inflows have probably had a beneficial impact on interest rates, although the full impact is difficult to quantify.
- Much larger inflows forecasted for the next several years, however, could have a more demonstrable influence on investment and interest rates.
- To the extent that foreign inflows may have resulted in some potential increase in the money supply, such a rise could be, and presumably has been, offset as much as nece sary through the Federal Reserve's open market operations with little difficulty.
- o Economic theory would indicate that the marked reduction of inflation in this country over the past two and one-half years would tend to increase the worldwide demand for dollars as an unofficial (or official) reserve asset. To the extent that this demand resulted in inflows which settled into elements of Ml or M2, this may have contributed somewhat to the recent drop in velocity. Further, to this extent, the rapid growth of monetary aggregates over the past year or so has been less inflationary than otherwise and represented a shift in the dollar demand function, which presumably should not be offset by open market operations.
- o Because of the fact that the current account numbers point to an inflow of foreign funds, while the capital account points to an outflow, there is uncertainty as to the magnitude of capital flows. Without a better understanding of

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the discrepancy between the two accounts, the exact influence of foreign flows on U.S. financial markets can only be a matter of conjecture. In particular, conclusions must be drawn with caution regarding the quantitative impact of capital inflows on interest rates and the desirability of offsetting versus accommodating the impact of such inflows on the monetary aggregates.

While on balance the effect of foreign capital inflows is probably favorable for the outlook for investment in this country, some caution may be warranted in viewing foreign capital markets as a long-term source of funds. The greater expected return on investment that might generally be anticipated from the more promising investment opportunities in developing countries should theoretically pull funds from developed nations, such as the United States. To the extent that the United States is being temporarily viewed as a safe haven due to its political stability and the superior liquidity of funds invested in its capital markets, resources could be withdrawn in the future if prospects for other countries improve.

Finally, in assessing any policy implications of the current international flow of funds, it should be noted that the U.S. financial market is the largest and most liquid in the world, providing an efficiency unparalleled elsewhere. This is one source of our economic strength and also provides this Nation with substantial service earnings. There may be appeals, particularly by countries suffering losses of capital, that we take temporary regulatory measures to stem this flow. Such measures could only detract from the attractiveness of this market and reduce its long-run earnings potential.

### Capital Flow Data and the Current Account

Conceptually, a nation's international payments accounts involve two major subaccounts: (1) a current account including exports and imports of goods and services (as well as government and private payments of interest for services of money borrowed) plus grants and gifts; and, (2) a capital account covering various financial flows (including those associated with financing of exports and imports). These two accounts should sum to identical balances of opposite sign, thereby offsetting or "financing" each other. In fact, they do not, differing by the amount of an errors and omissions entry which has been growing sharply in recent years. The two sets of series — current account and capital flows — provide the statistical

raw material for analyzing the effects of international financial flows on economic developments in this country. Details underlying the capital flow figures -- containing types of funds flowing into and out of the country -- are the most useful in analyzing impacts on financial markets, but unfortunately, as discussed below, the capital flow data probably are substantially in error, reducing their usefulness.

Table 1: U.S. Balance of Payments (Billions of dollars, rounded)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Current account*	-7.1	-5.2**	-18.1	-4.2	14.5	15.4	1.0	-0.4	-4.6	11.2
Capital flows, net	-4.4	-3.6**	-24.0	-14.8	16.5	2.9	-25.6	-31.1	-29.9	-30.2
Private, net	-8.0	-9.9	-26.7	-25.7	-16.2	-26.8	-7.0	-33.4	-25.1	-22.7
Direct investment, net	-8.6	-4.3	-11.6	-7.6	-8.2	-8.2	-13.3	-5.6	12.3	13.4
Banking flows, net	-1.3	-3.5	-12.9	-10.4	-4.7	-17.5	6.4	-36.1	-41.7	-45.1
Securities, net	3.2	-0.8	-1.2	-4.8	-2.5	0.8	1.6	4.6	4.5	5.2
Other U.S. corps., net	-1.3	-1.4	-1.0	-2.9	-0.9	-2.0	-1.7	3.7	-0.2	3.9
Official**	3.6	6.3**	2.7	10.9	32.7	29.7	-18.5	2.3	-4.9	-7.5
Errors and omissions***	-2.7	-1.5	5.9	10.5	-2.0	12.5	25.4	29.6	24.2	41.4

Sign reversed.

Table 1 above summarizes the two measures of the U.S. balance of payments stretching back to the early 1970's. The current account series (expressed here with reversed sign from the published figures so that it, less the net capital flow figures, equals the "errors and omissions" series) registered an inflow of \$11.2 billion from abroad in 1982 after small outflows in the prior two years. On the other hand, the aggregate known capital transactions series has been relatively little changed over the past three years -- recording capital outflows of \$31.1 billion in 1980, \$29.9 billion in 1981, and

Excluding certain extraordinary loan-to-grant conversions.

<sup>\*\*\*</sup> Current account less total net capital flows.

Note: (1) Positive numbers represent an inflow, negative numbers an outflow from the United States. (2) SDR allocation of \$1.1 billion, \$1.2 billion, and \$1.1 billion in 1979, 1980, and 1981, respectively, not shown in table above.

\$30.2 billion in 1982. "Errors and omissions" -- the balancing item in the accounts -- rose sharply to \$41.4 billion last year, from already high readings of between \$24 and \$30 billion in the three preceding years.

These aggregate figures mask significant changes in U.S. private sector international capital flows, which are presented in greater detail for the most recent years in Table 2 below. The table presents the gross outflow and inflow numbers, as well as the net flows.

Table 2: Net Private Sector International Capital Flows (Change in asset holdings)

	1978 (Bil:	1979 lions of	1980 dolla:	1981 rs, rou	1582 nded)
Total net private	-26.8	-7.0	-33.4	-25.1	-22.7
Direct investment, net Outward flows Inward flows	-16.1	-13.3 -25.2 11.9	-5.6 -19.2 13.7	12.3 -9.7 22.0	13.4 3.0 10.4
Banks, net Claims Liabilities	-17.5 -33.7 16.1	6.4 -26.2 32.6	-36.1 -46.8 10.7	-83.9	-45.1 -109.3 64.3
Securities, net U.S. purchase of foreign Stocks	0.8 -3.6 0.5	1.6 -4.7 -0.9 -3.8	-2.3	-5.6 -0.2	-8.0 -1.4
Monofficial foreign pur- chase of U.S. Treasury	-4.1 2.2	5.0	2.6	3.0	7.0
securities  Foreign purchase  of other U.S.	2.3	1.4	5.5 4.3	7.2	6.1
Stocks Bonds U.S. nonbanking concerns	1.3	0:3	3.7	2.1 -0.2	2.5 3.9
Claims Liabilities	-3.9 1.9	-3.3 1.6	-3.2 6.8	0.9	

Note: Positive numbers represent an inflow, negative numbers an outflow from the United States.

- On a net basis, <u>direct investment</u> transactions (defined as those in which the investor maintains at least a 10 percent share in the equity of the foreign establishment) have swung over the past few years from outflow to inflow.
  - -- U.S investments abroad shifted from an increase in foreign asset holdings of \$25.2 billion in 1979 to a rise of \$9.7 billion in 1981 (both capital outflows) and then to an inflow of \$3.0 billion in 1982, the first such inflow in the post-World War II era. (The 1982 inflows are believed to have largely reflected external borrowings of U.S. corporations in Euro-bond markets, through foreign financing affiliates.)
  - -- Foreign direct investment in the United States was unusually high in 1981 (due to a few large takeovers) and has been strong (ranging between \$10 and \$15 billion) in other recent years.
- o Net outflows through the <u>banking</u> system rose further to \$45.1 billion in 1982, though the pace of growth in claims and liabilities slowed considerably during the course of 1982 and into 1983 (see tabulation below).

Table 3: Bank Reported Flows

		1983			
		II	III	IV	I
		uarterl sted, b			
Bank flows, net	-6.9	-13.9	-9.7	-14.7	-7.6
Claims	-32.6	-38.7	-20.6	-17.5	-17:5
Liabilities	25.7	24.8	11.0	2.8	9.9

The net banking outflows dwarf the net capital inflows of the other private sector categories. These banking flows are known to include a large volume of transactions by U.S. banking offices with affiliated banks located in Euro-market centers abroad, in addition to direct transactions with foreign nonbank customers.

- In the securities account, private foreign purchases of U.S. stocks and non-Treasury bonds have been sizeable in recent years -- accounting for capital inflows ranging from \$5.5 billion in 1980 and \$7.2 billion in 1981. They increased further in the first quarter of this year. Private foreign purchases of U.S. Treasury instruments totalled \$7 billion in 1982. On the other side of the ledger, U.S. purchases of foreign securities rose to \$8.0 billion in 1982 and continued strong in the first quarter of this year.
- Reports by U.S. nonbanking concerns show claims on 0 foreigners declining \$7.0 billion last year, while liabilities to foreigners also declined \$3.1 billion, both reversing the previous normal pattern to produce a net inflow. (This category includes both trade credits and financial claims and liabilities vis-a-vis foreign banks, etc.)

The recent quarterly pattern of payments developments is shown in the next table, below.

Table 4: U.S. Balance of Payments

		<u> II</u>	982 <u>III</u>	IV	1983 1
	(Billio	ns of do	llars, quarte	not sea	sonally
Current account*	-0.3	-2.2	8.1	5.5	3.0
Capital flows, net     private, net     Direct investment, net     Banking flows, net     Securities purchase, net     Other U.S. nonbank     corporations, net	-4.9 0.2 1.4 -6.9 2.0	-9.2 -8.5 4.2 -13.9 4.0	-8.2 -7.5 3.1 -9.7 -1.5	-8.0 -6.9 4.7 -14.7 0.7	-4.9 en.a. 0.9 -7.6 3.8
Official, net	-5.1	-0.7	-0.7	-1.1	-2.0
Errors and omissions**	4.5	7.0	16.3	13.6	7.9

<sup>\*</sup> Sign reversed.

Note: Positive numbers represent an inflow, negative numbers an outflow from the United States.

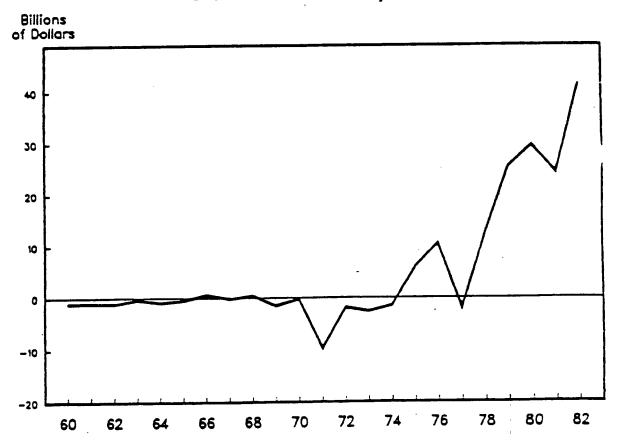
<sup>\*\*</sup> Current account less total net capital flows.

e - Estimate.

On balance, the capital flow data show large net outflows, with the banking system contributing the most to this result. However, these are swamped by the large errors and omissions inflow. Absent other information or assumptions as to the allocation of recent large errors and omissions entries between the current and capital accounts in U.S. balance of payments statistics, the true magnitude of net capital flow is uncertain—presumably lying somewhere between the net deficit on current account and the net outflows on total known capital transactions.

As discussed elsewhere in the series of papers being prepared for Economic Policy Study Number 9, the increasing size of the errors and omissions series is a matter of concern. The weight of opinion appears to be that the bulk of the errors reflects gaps in recording capital inflows into this country, which would imply that the net capital flow series should have been a smaller negative (smaller outflow) in recent years than the recorded transactions show or perhaps even been positive (an inflow). Some observers also believe that figures on our

# Errors and Omissions in U.S. Balance of Payments



exports of services are understated, which would imply that the current account balance registered too large an inflow in 1982. However, the bulk of the error most probably resides in the capital flow data. The recent strength of the dollar would not be consistent with the large outflow of funds recorded in capital flow transactions. Rather, the recent behavior of the dollar requires an assumption of sizable net capital inflow in order to be consistent with the deficits recorded on current account and still allow for what appears to have been periodic excess demand for dollars in the foreign exchange markets. The sharp upward trend in errors and omissions since the latter half of the 1970's is clear in the chart on the previous page.

Some analysts have found a correlation between the movements of the errors and omissions series and interest rates in this country. More likely, a variety of influences are at work, including real interest rates abroad as well as in this country, exchange rate expectations, international debt crises, and the search for a safe haven for funds.

Errors and omissions apparently reflect to some material degree unrecorded capital account items, but our ignorance as to the specific types of flows prevents one from relating international financial flows to domestic financial flows in fully satisfactory fashion. However, reported capital account items in the balance-of-payments statistics are incorporated in the Federal Reserve's flow-of-funds tableau. Some orders of magnitude of these known international capital flows to domestic financial flows are presented below.

### Foreign Account in the Flow-of-Funds

The flow-of-funds accounts use the information provided in the U.S. capital accounts discussed above in order to gain some insight as to how foreign flows affect U.S. financial transactions. Unfortunately, flow-of-funds data are subject to the same apparent failure of the international transactions measurements to capture the total flow of capital into the United States. As a result, flow-of-funds also show net financial disinvestment on the order of \$30 billion annually over the past four years and at about a \$20 billion annual rate in the first quarter of this year (latest available) -- an outcome that does not square with the current account results or the behavior of foreign exchange markets.

The flow-of-funds does provide a framework for examining some individual aspects of total financial assets and liabilities, which might point to any significant changes developing in financial transactions. For instance, foreign activity in

U.S. credit and equity markets can be measured relative to the total supply of funds to these markets. (Credit and equity market transactions are narrower than total financial transactions since they do not include such assets and liabilities as those arising from direct investment or trade credit.)

According to the flow-of-funds data, foreign funds make up a relatively small share of total funds advanced in credit markets. Last year, total funds of \$428.0 billion were advanced to nonfinancial sectors in U.S. credit markets. In the first quarter, the figure rose to \$460.1 billion, annual rate. Funds advanced directly to the nonfinancial sector by foreigners accounted for close to \$20 billion or between 4 and 5 percent of the total in both periods. These figures are down from the nearly \$40 billion (roughly 10 percent) of credit supplied by foreigners in 1977 and 1978.

In addition to direct lending, foreigners also lend indirectly via the banking system. There has been a sharp reduction of foreign lending through U.S. financial intermediaries in recent years. In fact, the last several years have witnessed a sharp outflow continuing into the first quarter of this year of foreign funds at banks. That is, the U.S. banking sector seems to be drawing less on foreign banks as a source of funds. The significance of these figures is not clear. Some, but not all, of the drawdown of foreign claims on U.S. banks has been offset by an increase of foreign holdings of Treasury and other securities. Furthermore, the foreign supply of funds to U.S. credit markets within the limited context of the flow-of-funds statistics may not be catching a large volume of unrecorded capital inflow. Therefore, not too much should be made of this phenomenon.

Table 5: Credit Supplied to the Nonfinancial Sector

	<u>1973</u>	1974	1975	1976	1977	1978	1979	1980	<u>1981</u>	1982	1983 -I (\$bil.,
	(				110115 0	1 00114				,	5.a.a.r)
Total funds	194.0	190.1	204.3	262.7	331.2	402.3	409.1	382.2	418.4	428.0	460.1
Foreign funds, total	3.7	21.3	-2.6	10.5	40.8	44.3	21.0	0.2	7.8	-10.4	-42.3
Credit instruments At banks	0.6	11.2	6.1 -8.7	15.2 -4.7	39.6 1.2	38.0 6.3	4.6 25.6	23.2 -23.0		18.2 -28.6	

Flow-of-funds data for equity markets indicate that foreigners have stepped up purchases of stock. In the first quarter, foreigners bought stock at a \$9.1 billion annual rate.

That would have accounted for about one-fourth of equity issued by nonfinancial corporations (although it is possible that some of the foreign funds went into equity in financial corporations). The dollar volume of foreign equity purchases was a quarterly record, although lower as a share of nonfinancial corporate issues than the 34 percent of 1982 and 42 percent of 1980.

The credit and equity market data discussed above represent only the supply side of financial markets. In order to measure the total impact of the foreign sector, it is also useful to examine funds raised by foreigners in U.S. markets. The table below combines both credit and equity financing instruments. Credit or equity funds supplied by the foreign sector are measured as an inflow. Funds raised are an outflow. The difference reflects the net impact of the foreign sector on our markets.

-- According to these data, the foreign sector since 1980 has been draining funds from domestic financial markets, not because of a sharp advance in funds raised but because of a downtrend in the amount of funds supplied. This somewhat anomalous result almost certainly reflects an underreporting of foreign capital inflows in the official statistics. (Note: the figures on funds supplied below differ from those on Table 5 on total funds in credit markets because of the inclusion of equities below.)

Table 6: Funds Supplied and Raised by the Foreign Sector in U.S. Financial Markets

•	1973	1974	1975	1976	1977	1978 f dollar	1979	1980	1981	1982	1983 -I (SE11.,
1	(3333)										s.a.a.r
Funds supplied Funds raised	6.5 6.1	21.8 14.8	2.1 11.5	13.3 19.6	43.5 13.9	46.7 33.3	22.7 21.0	5.6 29.3	13.6 27.3	-6.5 16.6	-33.2 <u>6.7</u>
Difference	0.4	7.0	-9.4	-6.3	29.6	13.4	1.7	-23.7	-13.7	-23.1	-39.9

The flow-of-funds data are derived from the international transactions figures showing a large capital outflow, and thus they inevitably yield this same result. Another view of the foreign sector's potential impact on funds for financial markets can be gained by examining the current account balance on the assumption that it better reflects actual developments. The deficit in 1982 would mean that there potentially might have been a capital inflow of \$11.2 billion, or about 2.5 percent of total funds raised, in U.S. credit and equity markets

by the nonfinancial sector. In the first quarter, foreign funds on this basis would have supplied about \$12 billion (also about 2-1/2 percent) of the \$495.4 billion raised in financial markets. As can be seen on Table 7 below, these numbers remain below the roughly \$15 billion (4 percent) contributed by the foreign sector in 1977 and 1978. However, forecasts for the next few years suggest that foreign capital will account for a substantially larger amount in both dollar and percentage terms of funds raised in U.S. financial markets.

Table 7: Foreign Capital Inflow (Current Account Basis)
Relative to Total Funds Raised in Credit and Equity Markets

	1973	1974	1975	<u>1976</u> bil	<u>1977</u> lion <b>s</b> o	<u>1978</u> f dolla	rs	1980	1981		1983 -I (\$bil., s.a.a.r)	
Total funds	201.9	194.2	214.2	273.2	333.9	402.2	401.3	395.1	406.9	439.4	495.4	
Poreign capital	-7.1	-5.2	-18.1	-4.2	14.5	15.4	1.0	-0.4	-4.6	11.2	12.0	
Foreign capital as percent of total funds	-3.5	-2.7	-8.5	-1.5	4.3	3.8	0.2	-0.1	-1.1	2.5	2.4	

Current account balance, sign reversed.

# The Current Account Balance in the National Income and Product Accounts

As has been outlined above, the international payments balance theoretically can be derived either from the figures on exports and imports of goods and services, along with figures on transfer and interest payments, or, alternatively, from figures on the financial flows. As has also been noted, the two measures in actuality generally have not given the same result, but have differed by an errors and omissions series that in recent years has steadily been widening.

with some modification, the current account balance, as measured by figures on trade in goods and services, enters into our National Income and Product Accounts (NIPA) as one element of the savings-investment tableau. (Modifications are for (1) different treatment of gold, (2) elimination of all capital gains and losses from the income figures, (3) and exclusion of shipments of certain military goods to Israel.

These modifications are fairly modest, totalling only \$3 billion in 1982.) This "net foreign investment" figure, as the modified current account balance is labeled in the NIPA, is presumed to represent net investment abroad if it is positive or net investment in this country by foreigners if negative. In the latter case, it can be thought of as augmenting the savings generated within this country. During 1982 and so far this year, this figure has been in the negative column, representing an inflow of funds to supplement domestic saving.

Table 8 below presents net foreign investment figures in relation to gross and net domestic saving. (Gross saving includes depreciation allowances. Net saving represents the sum available for augmenting the nation's stock of capital after provision has been made for replacing existing capital as it wears out. Depreciation figures are subject to sizeable errors which can feed into net saving figures.) The net foreign investment figures, even at the -\$36 billion annual rate estimated for the second quarter of this year, are fairly small in relation to gross domestic saving, either by the private sector or for the total economy including the dissaving of the Federal Government. For the second quarter of this year, net foreign investment equaled 6.7 percent of gross private saving and 8.5 percent of total gross saving. However, in relation to total net domestic saving, which was negative in the fourth quarter of last year and quite small in the first half of this year, the net inflows can be viewed as providing a significant supplement to domestically generated funds.

Table 8: Net Foreign Investment in Relation to Domestic Savings

	1977	1978	1979	1980	1981	1982	1982 IV	<u>19</u>	83 IIe
	(		billi	ons of	dollars	, annua	l rate-		)
Gross domestic saving Private Total	326.9 309.1	374.0 374.8	407.3 422.7	435.4 405.9	509.6 483.8		526.6 351.3		533.0 421.1
Net domestic saving Private Total	131.7 113.9	151.5 152.4	151.2 165.6	142.2	180.1 153.2	162.4	158.3 -17.0	170.6	159.9 48.0
Net foreign investment	-13.6	-14.3	-1.8	6.3	4.0	-8.3	-21.9	-6.7	-35.8

e - estimated.

Net inflows (negative net foreign investment) are generally expected to widen, at least through next year, as indicated by projected figures of three leading private forecasting firms. Internal government projections for 1984 are, if anything, slightly higher than the private forecasts. (See Table 9 below.)

Table 9: Private Forecasts of Net Foreign Investment

		1983 (bil	$\frac{1984}{\text{lions of}}$	dollars)
DRI	EFA	-31.0	-51.4	-62.0
Wharton		-33.8	-52.7	-46.6
Chase		-35.5	-59.8	-64.5

If inflows in the \$50 to \$60 billion range materialize, they would represent a significant source of financing of investment spending in this country (and of the Federal deficit). Total net saving (including Federal dissaving) is projected to remain fairly small in relation to overall economic activity through 1984 and 1985. Of course, such inflows would represent a drain of funds from the other industrialized nations and perhaps from LDCs, many of which are undergoing severe financial stress.

As has been noted earlier, the net foreign investment (and current account) figures may be biased to indicate a somewhat greater capital inflow (and current account deficits) than is actually the case. The data on known capital flows alone would suggest a net capital outflow in 1982 of \$30 billion, rather than an inflow of \$11 billion as measured by the current account. While the truth may lie somewhere between the two sets of numbers, most analysts apparently would consider the balance of payments current account (and NIA foreign investment) numbers much closer to the truth.

## Financial Impacts of Capital Inflows

The foregoing has indicated that there is great uncertainty as to the magnitude of capital flows into this country currently. The current account figures point in one direction, while capital flow data point in another. While the evidence generally indicates that the current account numbers are closer to the truth,

without knowing more about the rapidly growing errors and omissions category, there is little beyond conjecture that can be said about the influence of flows on financial markets in this country. It is therefore only with great care that one should attempt to draw conclusions as to the impact of capital flows on interest rates and as to the desirability of offsetting or accommodating monetary policy vis-a-vis the impact of the inflows on the monetary aggregates.

Even assuming that the current account (and net foreign investment) figures are correct, so that there was an inflow of funds last year and a more substantial inflow so far this year (which will swell in 1984 according to the forecasts), the magnitude of the influences on interest rates and other financial variables is not readily evident.

- Some analysts believe that high real interest rates here, presumably generated by strong combined public and private credit demands, are acting as a magnet, drawing in foreign funds. In terms of supply and demand for loanable funds, the inflows would help moderate interest rates, holding them below levels that they otherwise might have reached. Clearly, any increment in funds to capital markets would tend to ease interest rates in the short run. However, the effects are hard to quantify and are easily exaggerated. The net foreign investment figure estimated at \$36 billion in the second quarter of this year would only represent 7-1/2 percent or so of total funds raised in the nonfinancial sector of the economy.
- From a different perspective, other analysts hold to the view that real interest rates fundamentally are determined by the expected real rate of return on capital, and thus the inflow of funds from abroad is one indicator that the investment incentives contained in the economic program are beginning to work. There undoubtedly is also some truth to this. However, the greatest effect of the incentives will probably be seen in the future as their impacts on business capital spending are not yet clearly evident. Business capital spending followed a fairly typical cyclical profile during the past recession, though perhaps holding up a little better than many expected on the basis of the profit squeeze and low rates of capacity utilization that developed. Not until the second quarter did capital spending begin to rise. If expected rates of return on capital have risen so as to attract capital from abroad, then similarly, rates of saving should have risen in this country, barring offsetting changes in time preference schedules. This is particularly so since many of the

incentives were in the form of individual tax reductions which might not be available to foreign owners of capital here. However, if the official National Income and Product Accounts figures can be believed, personal saving rates have declined somewhat. On the other hand, other sets of data show a different pattern. In particular, the saving rate calculated from the household sector account of the flow-of-funds shows much higher rates of saving and increases in the past few years. On balance, the incentives contained in the economic program probably will have their impact over the longer term as the economy rights itself and moves onto a sustained growth path.

- Capital inflows may also be associated with lowered expectations of rates of return on capital invested abroad and with the political and economic uncertainties now current in many developing nations, as well as in some industrialized countries. Typically, real rates of return might be greatest in developing nations which have not undergone capital deepening; funds would normally gravitate to those nations. In current troubled times, they apparently are not doing so. Rather, this country has provided a safe haven. Funds might well flow into this country during such periods regardless of interest rate differentials.
- o Finally, the size and openness of the U.S. financial market provides liquidity and efficiency unparalleled elsewhere, and funds are naturally attracted to this market, which, in turn, is one of the sources of our economic strength and one which provides a substantial volume of service income. Regulatory measures taken abroad to inhibit flows to this market only enhance its attractiveness. Correspondingly, any regulatory measures we might take, either on our own initiative or at the behest of other governments, to inhibit flows to the United States would detract from the long-run effectiveness of this market and reduce potential service income.

On balance, capital inflows recently (accepting the current account figures as being accurate) have undoubtedly had some moderating influence on interest rates, though the size of the effect is difficult to quantify. Impacts should be even greater next year if private (and public) forecasts of the current account balance prove correct. A portion of the flows may represent funds being sheltered here during uncertain times abroad and could quickly flow outward if there were to be a sudden change in expectations as to economic prospects in the other countries.

### Capital Inflows and U.S. Monetary Policy

The inflow of foreign capital to the United States and the related strength of the dollar in foreign exchange markets has had both beneficial and complicating impacts on monetary policy. The beneficial aspects have reflected the general effects of capital inflows on real activity and overall financial conditions in the economy. The difficulties caused by the inflows, in contrast, are largely associated with the technical conduct of monetary policy.

Broadly speaking, foreign capital inflows and the strong performance of the dollar have aided the Federal Reserve in its efforts to achieve its overall policy goal of reasonable real growth of the economy with a continuing decline in the rate of inflation. On the one hand, the dollar's strength has acted to reduce import prices and, as a result, has lessened inflationary pressures emanating from the foreign sector. At the same time, the dollar's strength has dampened U.S. export growth, though once the cost structure of export producing industries has had time to adjust fully to the lower inflation experienced in this country over the past few years, this impact will be moderated.

The direct impact of foreign capital flows on the conduct of monetary policy, specifically on the growth of the money supply, depends on the source of the dollars that are being invested in this country. There are three general sources: U.S. domestic dollar holders; foreign dollar holders (Euro-dollars); and the Federal Reserve or foreign central banks.

In the first alternative, dollars obtained from U.S. domestic holders may be viewed as essentially representing the counterpart to the U.S. trade deficit. That is, the dollar inflow arises when U.S. importers pay for goods with dollars that are in turn recycled by foreigners into the U.S. capital market or into other U.S. investments. Clearly, only the ownership of the funds changes with no impact on the money supply.

If the funds for investment in the United States are obtained from the Euro-dollar market, the situation is somewhat different. The difference arises because — by definition — dollar holdings of foreign commercial banks, like official dollar balances, are excluded from the money supply. Assuming that the dollars for investment are acquired through a normal exchange market transaction without intervention by a central bank, when the dollar is invested in the United States — or even as it is deposited to the account of a nonbank foreigner

in a U.S. bank -- it becomes a part of the money supply. (In technical terms, the movement from a Euro-dollar to a domestic dollar changes the money multiplier so that a given level of the monetary base produces a higher level of the money supply.) To the extent that the increase in the money supply is larger than the Federal Reserve desires after taking account of all other changes, open market operations would be needed to offset the increase.

The most obvious impact of foreign capital inflows on the U.S. money supply potentially occurs when those inflows lead to an appreciation of the dollar exchange rate to a level that prompts intervention either by the Federal Reserve or by foreign central banks. Currently, U.S. exchange market policy limits intervention to counteracting disorderly market conditions; foreign policies, however, are often more oriented toward intervention to achieve domestic ends. If the Federal Reserve intervenes directly in the foreign exchange market to stem the rise in the dollar rate, it sells dollars and buys foreign currencies. Conceptually, this activity is no different in its effect on the monetary base and the money supply from a purchase of government securities in a Federal Reserve open market operation. Reserves are supplied, and given the money multiplier, the money supply will grow. If that impact is to be avoided, offsetting open market operations must be taken, i.e., the foreign effect must be sterilized.

In the case of intervention by a foreign central bank, there are two possible scenarios. In general, a foreign central bank obtains the dollars for its intervention by the liquidation of a portion of the short-term dollar investments it holds as a part of its reserves. If liquidation is achieved by selling the securities to the Federal Reserve, then the foreign central bank is essentially acting only as a conduit for a Federal Reservegenerated increase in the monetary base and, consequently, in the money supply. Again, offsetting open market operations would be needed to counteract the transaction.

The liquidation of the foreign central bank's short-term securities to provide intervention funds need not require a sale of dollars by the Fed, however. Specifically, the Fed may pass the sell order through to the market, effectively acting only as an agent in a relatively straightforward market transaction. Dollars are transferred from the domestic holder to the foreign central bank in exchange for securities, and the central bank then transfers the dollars through exchange market intervention to another private holder. There is no change in the monetary base or in the money supply.

The general conclusion is that foreign capital inflows may lead to some increase in the money supply, but any such increase can be offset by counteracting open market operations by the Fed. In the context of the size of the Fed's overall operations to achieve its general operational goals, it is unlikely that the size of such operations to offset foreign exchange effects on the money supply would be large. The foreign exchange markets are very large, of course. Nevertheless, foreign central bank intervention in those markets has traditionally been limited in size, and Fed actions to offset the money supply effects of those actions can easily be folded into the Fed's general program of domestic open market activities.

However, the conflicting evidence from the current and capital accounts and the resulting uncertainty as to the size of the likely foreign inflows highlight the need for caution in drawing conclusions regarding the impact of capital inflows on interest rates and the desirability of either offsetting or accommodating the impact of such inflows on the monetary aggregates should they occur. It should be borne in mind that to the extent that inflows from abroad may have settled in deposits comprising elements of MI or M2, they may have contributed some portion of the drop in velocity during 1982 and early 1983. To that extent, the rapid growth rates of MI and M2 in the past year or so may have been less inflationary than otherwise and may be viewed as part of the shift in the demand for dollars. To the extent that this is the case, steps to offset this demand shift would be undesirable.

A final topic often raised in connection with the inflow of foreign capital is its impact on Treasury debt management operations. That is, it is often questioned to what extent these inflows have lessened the Treasury's financing problems.

Once again, it is likely that there has been some benefit, but only partial data are available to quantify its extent. Among the data that are available are those showing the amounts of Treasury securities sold to foreign official purchasers through "add-on's" to Treasury auctions. These "add-on's" represent orders for new issues placed through the Federal Reserve by foreign official purchasers; and the amounts sold are issued in addition to the announced size of the offering to private investors. Through mid-August, such "add-on's" in 1983 totalled about \$5.9 billion. These data, however, do not include sales of Treasury issues to private or official foreign investors through the normal auction channels or through normal market transactions. In the first quarter of 1983, data that are available on total net foreign purchases of Treasury issues suggest that these purchases of Treasury securities by foreigners were relatively minor.

### Conclusion

According to available data, the current account balance points to an inflow recently, while the recorded flows in the capital account point to large outflows; the extent of our ignorance is captured by an "errors and omissions" series. That discrepancy presumably hides a number of different types of flows — both in and out of the country — and those would need to be explicitly detailed in order to assess fully the impact of capital inflows on domestic financial market conditions.

Capital inflows recently have probably had some moderating influence on interest rates, though the size of that impact is difficult to quantify. Net foreign investment in the United States (the national income account counterpart of the current account balance) has apparently provided a significant supplement to domestically generated funds. In the second quarter of this year, net foreign investment flows totalled close to \$36 billion and equaled over 22 percent of net private domestic saving and 75 percent of total net saving (including dissaving by the Federal government).

- o Net inflows into this country are generally expected to widen sharply at least through next year, providing upwards of \$50 billion of inflow of foreign funds in 1984.
- o If those flows materialize, they would represent a significant source of financing of investment spending in this country (and of the Federal deficit) during a period when total net domestic saving (including Federal dissaving) is projected to remain quite small in relation to overall economic activity.

with respect to its implication for U.S. monetary policy, net foreign investment in this country and the strong performance of the dollar have aided the Federal Reserve in its efforts to achieve its policy goal of a continuing decline in the rate of inflation. The dollar's strength has acted to reduce import prices and, as a result has acted to lessen inflationary pressures emanating from the foreign sector. The inflow of capital funds from abroad may complicate monetary policy, but any influences on our money supply can readily be offset by appropriate open market operations.

In view of all these factors, regulatory action to limit capital inflows to this country would appear to be an unpromising action. Such measures could only detract from the long-run attractiveness of the U.S. money and capital markets to the detriment of our international financial position and prospects for long-run growth.

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